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**South Florida Water Management District  
Regulatory Peer Review Forum  
August 6, 2004  
10am-noon**

**SUMMARY**

**Attendees:**

|                        |  |
|------------------------|--|
| Jay Foy .....          | Stormwater J Engineering, Inc.                     |
| Craig Kidwell .....    | QURE Property Sciences                             |
| Bill Keith.....        | Keith & Associates                                 |
| Hian C. Kor .....      | K-F Group  |
| Patrick Martin .....   | Lake Worth Drainage District                       |
| Tracy Robb.....        | Calvin-Giordano                                    |
| Ken Todd.....          | Palm Beach County                                  |
| Gerry Ward.....        | Ward Engineering                                   |
| Alan Wertepny.....     | Mock Roos  |
| Terrie Bates.....      | SFWMD - Environmental Resource Regulation Staff    |
| Damon Meiers.....      | SFWMD - Environmental Resource Regulation Staff    |
| Anita Bain .....       | SFWMD - Environmental Resource Compliance Division |
| Beth Colavecchio ..... | SFWMD - Regulatory Information Management Division |

**1. Opening remarks and review of previous meeting minutes (Damon Meiers)**

Mr. Meiers opened the meeting at about 10:10 am. All persons present introduced themselves. There were no comments about the minutes of the previous meeting.

Mr. Meiers stated that the Emergency Operable Structure Policy that requires a Memorandum of Understanding (MOU) will be revised to remove the MOU requirements. After six years of experience, staff believes the policy no longer requires MOUs. It is scheduled to go before the Board in September.

The following issues were raised:

- Gerry Ward raised concerns regarding MOU and variances. Patrick Martin stated that LWDD still maintains control over HOA structures.
- Ken Todd stated that it has worked well with local governments. The flexibility in working with local governments needs to continue. General consensus is that the program is working well. Ken Todd also stated that it's been helpful to have the annual meeting with District and Local Government.

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- Patrick Martin inquired about “Know the Flow.” Mr. Meiers stated that an enhanced version of this program is being conducted in Broward County. Mr. Martin suggested that a similar program should be conducted here in Palm Beach County.
- Material on pervious concrete was distributed to the group.

## **2. C-51 Basin Study Update/C-51 Basin Rulemaking Update (Damon Meiers)**

Mr. Meiers reported on the C-51 Basin Rule. STA-1E construction is being finalized.

C-51 dredging/widening project is underway. Completion date is scheduled for November. Operation permit from DEP will take 2-3 months. Water quality going out has to be better than what is coming in before permanent pumping operations can begin.

Mr. Martin asked about dovetailing with rule. Mr. Meiers reported that we have to have an effective date for rule before we can take the next step. This will depend on STA-1E operation effective date. Mr. Meiers also reported on interim C-51 considerations. He distributed the comparison results for 100-year/72 hour storm event based on the existing conditions report provided by Palm Beach County (**Attachment 1**). Mr. Meiers is in the process of preparing a guidance memo to staff based on new existing conditions model runs. This becomes the best available information which can be used in permitting now. Mr. Meiers will provide updated table to match with map.

## **3. TMDLs/Verified Group 2 Impaired Waters List (Damon Meiers)**

Mr. Meiers distributed a list of Group 2 impaired waters and WQ staff guidance (**Attachment 2**). General discussion ensued regarding current rules that require new projects be designed so they do not contribute to the impairment of an impaired water body and the difficulty this adds to permitting.

Carla Palmer will be invited to attend next meeting to describe her new role as the Director of the new Stormwater Division.

## **4. Scripps Update (Damon Meiers)**

Mr. Meiers gave a brief update on the Scripps project. The ERP for the Mecca Site is being presented at the August Governing Board meeting with a recommendation for approval. He reported that the Vavrus DRI was amended, but informed that there was no ERP as of yet.

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**5. Stub Canal Taskforce (Ken Todd)**

Mr. Todd provided an update on Stub Canal Task Force developing scope for analyzing basin, then developing alternatives. District has done sounding of portions of canal. The County and City of West Palm Beach will be providing survey information.

**6. Next Meeting date/topics/adjournment**

Jay Foy complimented the new Basis of Review CD.

Potential items: Permit review efficiency update outlining what was implemented.

The next meeting is scheduled for Friday, October 1, 2004, at 10am in the Rogers Conference Room.

The meeting adjourned at about 11:55 A.M.

- c: H. Dean - Executive Director  
C. Wehle - Assistant Executive Director  
S. Wood - District General Counsel  
C. Merriam - Deputy Executive Director - Water Resources  
A. Sewell - Media and Community Relations  
T. Bates - Director - ERR  
Environmental Resource Regulation Division Directors

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## **ATTACHMENT 1**

### **Comparison Results for 100-year/72 Hour Storm Even Based on Existing Conditions**

**C-51 BASIN MODEL: EXISTING CONDITIONS  
PERSIMMON BV CONNECTION TO OKEECHOBEE BV**

**Table 3-2 Comparison of Results for 100-yr, 72-hr Storm Event**

| Sub-basin | Existing Condition |                 | Basin Rule Alternative A3 |                 | Recommended Stage (ft) |
|-----------|--------------------|-----------------|---------------------------|-----------------|------------------------|
|           | Peak Outflow (cfs) | Peak Stage (ft) | Peak Outflow (cfs)        | Peak Stage (ft) |                        |
| 1         | 45                 | 14.2            | 48                        | 14.2            | 14.2                   |
| 2A        | 166                | 13.3            | --                        | --              | --                     |
| 2B        | 23                 | 14.0            | 50                        | 13.8            | 13.8                   |
| 3         | 26                 | 15.8            | 26                        | 15.8            | 15.8                   |
| 4         | 29                 | 16.6            | 29                        | 16.6            | 16.6                   |
| 5         | 61                 | 17.7            | 80                        | 17.4            | 17.4                   |
| 6         | 67                 | 19.2            | 67                        | 19.2            | 19.2                   |
| 7         | 220                | 19.9            | 226                       | 19.9            | 19.9                   |
| 8         | 1                  | 20.8            | 418                       | 20.6            | 20.6                   |
| 9         | 1                  | 18.0            | 38                        | 17.6            | 17.6                   |
| 10        | 18                 | 18.3            | 17                        | 18.3            | 18.3                   |
| 11        | 814                | 19.1            | 1425                      | 18.9            | 18.9                   |
| 12        | 52                 | 17.9            | 52                        | 17.5            | 17.5                   |
| 13        | 267                | 16.7            | 406                       | 16.6            | 16.6                   |
| 14        | 223                | 15.8            | --                        | --              | --                     |
| 15A       | 856                | 18.2            | 1000                      | 18.2            | 18.2                   |
| 15B       | --                 | --              | --                        | --              | --                     |
| 16A       | 518                | 17.1            | 566                       | 16.8            | 16.8                   |
| 16B       | 58                 | 19.0            | 58                        | 19.0            | 19.0                   |
| 20A       | 61                 | 16.5            | 127                       | 16.1            | 16.1                   |
| 17        | 412                | 16.8            | 534                       | 16.6            | 16.6                   |
| 18        | 291                | 16.0            | 431                       | 15.7            | 15.7                   |
| 20B       | 480                | 17.0            | 751                       | 16.8            | 16.8                   |
| 21A       | 0                  | 17.3            | 0                         | 17.3            | 17.3                   |
| 21B       | 96                 | 17.7            | 135                       | 17.7            | 17.7                   |
| 22        | 521                | 17.5            | 527                       | 17.5            | 17.5                   |
| 23        | 850                | 17.1            | 849                       | 17.1            | 17.1                   |
| 24        | 592                | 17.9            | 601                       | 17.9            | 17.9                   |
| 25A       | 450                | 14.6            | 449                       | 14.6            | 14.6                   |
| 25B       | 390                | 14.7            | 391                       | 14.7            | 14.7                   |
| 26        | 320                | 13.8            | 320                       | 13.8            | 13.8                   |
| 27        | 320                | 13.2            | 320                       | 13.2            | 13.2                   |
| 28        | 434                | 12.3            | 440                       | 12.4            | 12.4                   |
| 29A       | 474                | 14.8            | 474                       | 14.8            | 14.8                   |
| 29B       | 830                | 15.2            | 830                       | 15.2            | 15.2                   |
| 30        | 268                | 14.1            | 268                       | 14.1            | 14.1                   |
| 31        | 670                | 13.1            | 670                       | 13.1            | 13.1                   |
| 32        | 527                | 13.0            | 527                       | 13.0            | 13.0                   |
| 33        | 546                | 13.6            | 546                       | 13.6            | 13.6                   |
| 34        | 163                | 17.0            | 171                       | 17.0            | 17.0                   |
| 35        | 45                 | 11.5            | 45                        | 11.3            | 11.3                   |
| 36        | 173                | 14.0            | 158                       | 14.0            | 14.0                   |
| 37        | 104                | 16.5            | 108                       | 16.4            | 16.4                   |
| 38        | 134                | 17.3            | 151                       | 17.2            | 17.2                   |

Note: Flow values are rounded to the nearest whole number  
 Stage values are rounded to the nearest one-tenth of one foot



## **ATTACHMENT 2**

### ***Group 2 Impaired Waters and WQ Staff Guidance***

St. Lucie - Loxahatchee Group 2 Basin/ Southeast District - Verified List  
Hydrologic Units: Southeast Florida Coast

| OGC Case Number | Basin Group Name        | WBID  | Water Segment Name                            | Waterbody Type | Waterbody Class | Parameters Assessed Using the Impaired Waters Rule (IWR) | Concentration Causing Impairment <sup>1</sup>  | Priority for TMDL Development <sup>2</sup> | Projected Year for TMDL Development <sup>2</sup> | Comments <sup>3</sup> (# Exceedances/# Samples)<br>PP=Planning Period VP=Verified Period   |
|-----------------|-------------------------|-------|---|----------------|-----------------|--|--|--|--|--|
| 03 2646         | Southeast Florida Coast | 3163  | FT PIERCE FARM CANAL (BELCHER CANY/TAYLOR CK) | STREAM         | 3F              | Dissolved Oxygen   | DO < 5 mg/L  | High                                       | 2006   | PP - 4/11 Potentially Impaired; VP - 21/49 Verified<br>nutrients, with both nitrogen and phosphorus as limiting nutrients, colimitation of Nitrogen and Phosphorus, TN during VP = 0.706 mg/L, TP during VP = 0.197 mg/L   |
| 03 2647         | Southeast Florida Coast | 3163B | C-25 EAST SEGMENT                             | STREAM         | 3F              | Nutrients (C+LA)   | TN = 1.438 mg/L<br>TP = 0.145 mg/L   | Medium                                     | 2008   | PP - No Data; VP - Verified, with one annual mean chl a value above 20 ug/L. Colimiting of nitrogen and phosphorus based upon TN/TP ratios [TN median = 1.438 mg/L and TP median = 0.145 mg/L, PP median TN/TP ratio = 10.46 (327 values), VP median TN/TP ratio = 10.11 (291 values)]                             |
| 03 2648         | Southeast Florida Coast | 3163B | C-25 EAST SEGMENT                             | STREAM         | 3F              | Dissolved Oxygen   | DO < 5 mg/L  | Medium                                     | 2008   | PP - 75/126 Potentially Impaired, VP - 52/109 Verified<br>to nutrients, with both nitrogen and phosphorus as limiting nutrients, colimitation of Nitrogen and Phosphorus, TN during VP = 1.445 mg/L, TP during VP = 0.139 mg/L   |
| 03 2649         | Southeast Florida Coast | 3163B | C-25 EAST SEGMENT                             | STREAM         | 3F              | Iron   | Fe > 1.0 mg/L  | Medium                                     | 2008   | PP - 30/39 Potentially Impaired; VP - 12/25 Verified   |
| 03 2650         | Southeast Florida Coast | 3190  | NORTH COASTAL                                 | ESTUARY        | 3M              | Nutrients (C+LA)   | TN = 0.93 mg/L<br>TP = 0.056 mg/L<br>Exceeds Shellfish Evaluation and Assessment Section thresholds  | Medium                                     | 2008   | PP - Potentially Impaired; VP - Verified, with two annual mean chl a values above 11 ug/L. Both phosphorus and nitrogen identified as limiting nutrients based on TN/TP ratios. TN median = 0.93 mg/L, TP median = 0.056 mg/L, PP TN/TP ratio median = 12.5 (357 values), VP = 14.87 (230 values)                  |
| 03 2651         | Southeast Florida Coast | 3190  | NORTH COASTAL                                 | ESTUARY        | 3M              | Bacteria (in Shellfish)                                  |  | Medium                                     | 2008   | Listed based on downgrade of shellfish harvesting classification.  |
| 03 2652         | Southeast Florida Coast | 3193  | ST. LUCIE RIVER                               | ESTUARY        | 3M              | Nutrients (C+LA)   | TN = 0.886 mg/L<br>TP = 0.108 mg/L<br>Exceeds Shellfish Evaluation and Assessment Section thresholds | Medium                                     | 2008   | PP - Potentially Impaired; VP - Verified, with one annual mean chl a value above 11 ug/L. Both phosphorus and nitrogen identified as limiting nutrients based on TN/TP ratios. TN median = 0.886 mg/L, TP median = 0.108 mg/L, PP median TN/TP ratio = 8.9 (630 values), VP median TN/TP ratio = 7.12 (221 values) |
| 03 2653         | Southeast Florida Coast | 3193A | ROOSEVELT BRIDGE                              | COASTAL        | 3M              | Bacteria (in Shellfish)                                  |  | Medium                                     | 2008   | Listed based on downgrade of shellfish harvesting classification.  |
| 03 2654         | Southeast Florida Coast | 3194  | NORTH ST. LUCIE                               | ESTUARY        | 3M              | Dissolved Oxygen   | DO < 4 mg/L, and < 5 mg/L as daily average   | High                                       | 2005   | PP - 119/410 Potentially Impaired; VP - 96/345 Verified<br>to elevated BOD during PP and VP. PP = 1/5 mg/L, and VP = 7/7 mg/L  |
| 03 2655         | Southeast Florida Coast | 3194  | NORTH ST. LUCIE                               | ESTUARY        | 3M              | Nutrients (Hist. CH+LA)                                  | TN = 0.742 mg/L<br>TP = 0.054 mg/L   | High                                       | 2005   | PP - Hist/Chla Potentially Impaired; VP - Verified, based on seven annual mean chl a values above 11 ug/L. Colimitation of nitrogen and phosphorus based TN/TP ratios. TN median = 0.742 mg/L and TP median = 0.054 mg/L, PP median TN/TP ratio = 5.17 (458 values), VP median TN/TP ratio = 5.43 (283 values)     |
| 03 2656         | Southeast Florida Coast | 3194  | NORTH ST. LUCIE                               | ESTUARY        | 3M              | Copper   | Cu > 3.7 ug/L  | Medium                                     | 2008   | PP - 3/3 Potentially Impaired; VP - 20/54 Verified   |
| 03 2658         | Southeast Florida Coast | 3194B | ST. LUCIE                                     | ESTUARY        | 3M              | Nutrients (CH+LA)  | TN = 1.1 mg/L  | High                                       | 2005   | PP - Hist/Chla Potentially Impaired; VP - Verified, with seven annual mean chl a values above 20 ug/L. Nitrogen is the limiting nutrient based on TN/TP ratios. PP median TN = 1.1 mg/L, PP median TN/TP ratio = 3.08 (131 values), VP median TN/TP ratio = 3.09 (242 values)                                      |
| 03 2659         | Southeast Florida Coast | 3194B | ST. LUCIE                                     | ESTUARY        | 3M              | Dissolved Oxygen   | DO < 4 mg/L, and < 5 mg/L as daily average   | Medium                                     | 2008   | PP - 75/557 Potentially Impaired; VP - 56/399 Verified<br>to elevated nutrients, with colimitation of nitrogen and phosphorus, TN during VP = 1.038 mg/L, TP during VP = 0.193 mg/L  |
| 03 2660         | Southeast Florida Coast | 3194B | ST. LUCIE                                     | ESTUARY        | 3M              | Copper   | Cu > 3.7 ug/L  | Medium                                     | 2008   | PP - 2/11 Not Impaired; VP - 25/58 Verified  |



**St. Lucie - Loxahatchee Group 2 Basin/ Southeast District - Verified List**  
**Hydrologic Units: Southeast Florida Coast**

| QGC Case Number | Basin Group Name        | WBD   | Water Segment Name   | Waterbody Type | Waterbody Class | Parameters Assessed Using the Impaired Waters Rule (IWR) | Concentration Causing Impairment <sup>1</sup> | Priority for TMDL Development <sup>2</sup> | Projected Year for TMDL Development <sup>2</sup> | Comments <sup>3</sup> (# Exceedances/# Samples) PP-Planning Period VP-Verified Period  |
|-----------------|-------------------------|-------|----------------------|----------------|-----------------|--|---|--|--|--|
| 03 2652         | Southeast Florida Coast | 3194D | FVEMILE CREEK        | STREAM         | 3F              | Dissolved Oxygen   | DO < 5 mg/L                                   | Medium                                     | 2008   | PP - 8/15 Potentially Impaired; VP - 12/30 Verified Linked to elevated BOD level during PP and VP. PP median BOD = 2.2 mg/L, VP median = 2.2 mg/L  |
| 04 0804         | Southeast Florida Coast | 3197  | C-24                 | STREAM         | 3F              | Fecal Coliform   | FC > 400 counts/100ml                         | Medium                                     | 2008   | PP - 9/41 Insufficient Data; VP - 9/41 Verified  |
| 03 2653         | Southeast Florida Coast | 3197  | C-24                 | STREAM         | 3F              | Nutrients (CHLA)   | TP = 0.258 mg/L                               | High                                       | 2005   | PP - Insufficient Data; VP - Verified, with one annual mean chl a value above 20 ug/L. Phosphorus limiting based on TN/TP ratios [PP TP median = 0.251 mg/L, VP TP median = 0.258 mg/L, PP TN/TP ratio median = 5.82 (417 values), VP TN/TP ratio = 5.88 (408 values)]                                       |
| 03 2654         | Southeast Florida Coast | 3197  | C-24                 | STREAM         | 3F              | Dissolved Oxygen   | DO < 5 mg/L                                   | High                                       | 2005   | PP - 100/156 Potentially Impaired; VP - 92/148 Verified Linked to elevated BOD during PP and VP [PP mean BOD = 3.0 mg/L, VP mean BOD = 3.0 mg/L]   |
| 03 2655         | Southeast Florida Coast | 3197  | C-24                 | STREAM         | 3F              | Iron   | Fe ≥ 1.0 mg/L                                 | High                                       | 2005   | PP - 302/9 Potentially Impaired; VP - 12/25 Verified   |
| 03 2656         | Southeast Florida Coast | 3200  | C-23                 | STREAM         | 3F              | Nutrients (CHLA)   | TP = 0.32 mg/L                                | Medium                                     | 2008   | PP - Insufficient Data; VP - Verified, with one annual mean chl a value above 20 ug/L. Phosphorus limiting for both PP and VP based on TN/TP ratios [PP TP median = 0.306 mg/L, VP TP median = 0.32 mg/L, PP median TN/TP ratio = 4.79 (420 values), VP median TN/TP ratio = 4.42 (328 values)]              |
| 03 2657         | Southeast Florida Coast | 3200  | C-23                 | STREAM         | 3F              | Iron   | Fe ≥ 1.0 mg/L                                 | Medium                                     | 2008   | PP - 47/57 Potentially Impaired; VP - 14/27 Verified   |
| 03 2658         | Southeast Florida Coast | 3200  | C-23                 | STREAM         | 3F              | Dissolved Oxygen   | DO < 5 mg/L                                   | Medium                                     | 2008   | PP - 79/161 Potentially Impaired; VP - 56/125 Verified Linked to elevated TP level. TP above the screening level for both the PP and VP. [PP median 0.31 mg/L, VP median 0.32 mg/L]  |
| 03 2659         | Southeast Florida Coast | 3208  | MANATEE POCKET       | ESTUARY        | 3M              | Nutrients (CHLA)   | TN = 0.805 mg/L<br>TP = 1.0 mg/L              | Low  | 2010   | PP - Potentially Impaired; VP - Verified, with four annual mean chl a values above 11 ug/L. Both phosphorus and nitrogen identified as limiting nutrient based on TN/TP ratios. PP median TN/TP ratio = 9.63 (175 values), VP median TN/TP ratio = 10.04 (154 values)  |
| 03 2670         | Southeast Florida Coast | 3208  | MANATEE POCKET       | ESTUARY        | 3M              | Copper   | Cu ≥ 3.7 ug/L                                 | Medium                                     | 2008   | PP - 0/1 Insufficient Data; VP - 27/30 Verified  |
| 04 0805         | Southeast Florida Coast | 3208A | MARTIN CO. ICOW      | ESTUARY        | 3M              | Copper   | Cu ≥ 3.7 ug/L                                 | Medium                                     | 2008   | PP - 0/1 Insufficient Data; VP - 19/24 Verified  |
| 03 2671         | Southeast Florida Coast | 3210  | TIDAL ST. LUCIE      | ESTUARY        | 3M              | Nutrients (CHLA)   | TN = 1.124 mg/L<br>TP = 0.185 mg/L            | Medium                                     | 2008   | PP - Potentially Impaired; VP - Verified, with seven annual mean chl a values above 11 ug/L. Both phosphorus and nitrogen are limiting nutrients based on TN/TP ratios. TN median = 1.124 mg/L, median TP = 0.185 mg/L, PP median TN/TP ratio = 6.44 (478 values), VP median TN/TP ratio = 5.87 (256 values) |
| 03 2672         | Southeast Florida Coast | 3210  | TIDAL ST. LUCIE      | ESTUARY        | 3M              | Copper   | Cu ≥ 3.7 ug/L                                 | Medium                                     | 2008   | PP - 0/2 Insufficient Data; VP - 8/25 Verified   |
| 03 2673         | Southeast Florida Coast | 3210A | ST. LUCIE CANAL      | ESTUARY        | 3M              | Nutrients (CHLA)   | TN = 1.18 mg/L                                | Low  | 2010   | PP - Not Impaired; VP - Verified, with one annual mean chl a value above 11 ug/L. PP median 1.281 mg/L and VP median 1.18 mg/L. PP median TN/TP ratio = 7.48 (234 values), VP median TN/TP ratio = 7.18 (161 values)   |
| 04 0806         | Southeast Florida Coast | 3210A | ST. LUCIE CANAL      | ESTUARY        | 3M              | Copper   | Cu ≥ 3.7 ug/L                                 | Medium                                     | 2008   | PP - No Data; VP - 22/36 Verified  |
| 03 2674         | Southeast Florida Coast | 3210A | ST. LUCIE CANAL      | ESTUARY        | 3M              | Dissolved Oxygen   | DO < 4 mg/L and < 5 mg/L as daily average     | Low  | 2010   | PP - 37/196 Potentially Impaired; 48/172 Verified Linked to nitrogen levels. TN levels during PP = 1.2935; VP = 1.254 mg/L   |
| 03 2675         | Southeast Florida Coast | 3210B | SOUTH FORK ST. LUCIE | STREAM         | 3F              | Dissolved Oxygen   | DO < 5 mg/L                                   | Low  | 2010   | PP - 92/209 Potentially Impaired; VP - 88/169 Verified Linked to elevated BOD level. BOD median = 2.25 mg/L  |

St Lucie - Loxahatchee Group 2 Basin/ Southeast District - Verified List  
Hydrologic Units: Southeast Florida Coast

| QGC Case Number | Basin Group Name        | WBD   | Water Segment Name     | Waterbody Type | Waterbody Class | Parameters Assessed Using the Impaired Waters Rule (NWR) | Concentration Causing Impairment  | Priority for TMDL Development | Projected Year for TMDL Development | Comments (If Exceedances/ Samples) PP-Planning Period VP-Verified Period   |
|-----------------|-------------------------|-------|------------------------|----------------|-----------------|--|---|-------------------------------|-------------------------------------|--|
| 04 0947         | Southeast Florida Coast | 3211  | BESSEY CREEK           | ESTUARY        | 3M              | Copper   | Cu > 3.7 ug/L   | Medium                        | 2008                                | PP - No Data, VP - 16/29 Verified  |
| 03 2676         | Southeast Florida Coast | 3211  | BESSEY CREEK           | ESTUARY        | 3M              | Dissolved Oxygen   | DO < 4 mg/L, and < 5 mg/L as daily average  | High                          | 2005                                | PP - 8/19 Potentially Impaired, VP - 10/29 Verified Linked to elevated TP level TP above the screening level for the PP and; VP (PP median 3.5 mg/L and; VP median 0.213 mg/L)   |
| 03 2677         | Southeast Florida Coast | 3211  | BESSEY CREEK           | ESTUARY        | 3M              | Nutrients (CHLA)   | TN = 0.213 mg/L   | High                          | 2005                                | PP - Insufficient Data, VP - Verified, with one annual mean chl a value above 20 ug/L. Phosphorus limiting based on TN median = 0.747 mg/L and TP median = 0.213 mg/L. PP TN/TP ratio median = 7.73 (13 values), VP = 3.86 (23 values)   |
| 03 2678         | Southeast Florida Coast | 3218  | C-44                   | STREAM         | 3F              | Dissolved Oxygen   | DO < 5 mg/L   | Medium                        | 2008                                | PP - 48/159 Potentially Impaired, VP - 50/154 Verified Linked to elevated BOD level of 6.6 mg/L during PP  |
| 03 2679         | Southeast Florida Coast | 3218  | C-44                   | STREAM         | 3F              | Iron   | Fe > 1.0 mg/L   | Medium                        | 2008                                | PP - 33/42 Potentially Impaired, VP - 13/26 Verified   |
| 03 2680         | Southeast Florida Coast | 3224  | JONATHAN DICKINSON     | ESTUARY        | 3M              | Fecal Coliform   | FC > 400 counts/100ml   | Medium                        | 2008                                | PP - 33/288 Not Impaired, VP - 24/162 Verified   |
| 03 2681         | Southeast Florida Coast | 3224  | JONATHAN DICKINSON     | ESTUARY        | 3M              | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds                                       | Medium                        | 2008                                | Listed based on downgrade of shellfish harvesting classification.  |
| 03 2682         | Southeast Florida Coast | 3224A | NORTH FORK LOXAHATCHEE | STREAM         | 3F              | Dissolved Oxygen   | DO < 4 mg/L, and < 5 mg/L as daily average  | Medium                        | 2008                                | PP - 52/74 Potentially Impaired, VP - 37/65 Verified Linked to nutrients, with both nitrogen and phosphorus as limiting nutrients, colimitation of nitrogen and phosphorus, TN during VP = 0.785 mg/L, TP during VP = 0.028 mg/L   |
| 03 2683         | Southeast Florida Coast | 3224A | NORTH FORK LOXAHATCHEE | STREAM         | 3F              | Nutrients (CHLA)   | TN = 0.795 mg/L<br>TP = 0.028 mg/L<br>Exceeds Shellfish Assessment Section thresholds | Medium                        | 2008                                | PP - Potentially Impaired, VP - Verified, with one annual mean chl a value above 20 ug/L. Colimitation of nitrogen and phosphorus based on TN/TP ratios. TN median = 0.795 mg/L and TP median = 0.028 mg/L. PP median TN/TP ratio = 31.53 (62 values), VP median TN/TP ratio = 31.53 (44 values) |
| 03 2684         | Southeast Florida Coast | 3226A | NW FORK LOXAHATCHEE    | ESTUARY        | 3M              | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds                                       | Medium                        | 2008                                | Listed based on downgrade of shellfish harvesting classification.  |
| 03 2685         | Southeast Florida Coast | 3226C | SW FORK LOXAHATCHEE    | ESTUARY        | 3M              | Fecal Coliform   | FC > 43 col / 100ml   | Low                           | 2010                                | PP - 23/157 Potentially Impaired, VP - 12/73 Verified  |
| 03 2686         | Southeast Florida Coast | 3226C | SW FORK LOXAHATCHEE    | ESTUARY        | 3M              | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds                                       | Medium                        | 2008                                | Listed based on downgrade of shellfish harvesting classification.  |
| 03 2687         | Southeast Florida Coast | 3229D | LOXAHATCHEE RIVER      | ESTUARY        | 2               | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds                                       | Medium                        | 2008                                | Listed based on downgrade of shellfish harvesting classification.  |
| 03 2688         | Southeast Florida Coast | 3234  | C-18                   | STREAM         | 1               | Total Coliform   | TTC > 2400  | Low                           | 2010                                | PP - 8/48 Potentially Impaired, VP - 5/24 Verified   |
| 03 2689         | Southeast Florida Coast | 3234  | C-18                   | STREAM         | 1               | Iron   | Fe > 1.0 mg/L   | Low                           | 2010                                | PP - 78/101 Potentially Impaired, VP - 30/58 Verified  |
| 03 2690         | Southeast Florida Coast | 5003A | SOUTH INDIAN RIVER     | ESTUARY        | 3M              | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds                                       | Medium                        | 2008                                | Listed based on downgrade of shellfish harvesting classification.  |
| 04 0909         | Southeast Florida Coast | 5003A | SOUTH INDIAN RIVER     | ESTUARY        | 3M              | Copper   | Cu > 3.7 ug/L   | Medium                        | 2008                                | PP - 0/1 Insufficient Data, VP - 14/23 Verified  |
| 03 2691         | Southeast Florida Coast | 8101B | DUBOIS PARK            | COASTAL        | 3M              | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds                                       | Medium                        | 2008                                | Listed based on downgrade of shellfish harvesting classification.  |
| 03 2692         | Southeast Florida Coast | 8101C | CORAL COVE PARK        | COASTAL        | 3M              | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds                                       | Medium                        | 2008                                | Listed based on downgrade of shellfish harvesting classification.  |

St. Lucie - Loxahatchee Group 2 Basin/ Southeast District - Verified List  
Hydrologic Units: Southeast Florida Coast

| OGC Case Number | Basin Group Name        | WBID | Water Segment Name     | Waterbody Type | Waterbody Class | Parameters Assessed Using the Impaired Waters Rule (IWR) | Concentration Causing Impairment <sup>1</sup>   | Priority for TMDL Development <sup>2</sup> | Projected Year for TMDL Development <sup>2</sup> | Comments <sup>3</sup> (# Exceedances/# Samples) PP-Planning Period VP-Verified Period   |
|-----------------|-------------------------|------|------------------------|----------------|-----------------|--|---|--|--|---|
| 03 2653         | Southeast Florida Coast | 8102 | COASTAL OCEAN 2        | COASTAL        | 3M              | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds.                                      | Medium                                     | 2008   | Listed based on downgrade of shellfish harvesting classification.   |
| 03 2654         | Southeast Florida Coast | 8103 | COASTAL OCEAN 3        | COASTAL        | 3M              | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds.                                      | Medium                                     | 2008   | Listed based on downgrade of shellfish harvesting classification.   |
| 03 2655         | Southeast Florida Coast | 8104 | COASTAL OCEAN 4        | COASTAL        | 3M              | Bacteria (in Shellfish)                                  | Exceeds Shellfish Assessment Section thresholds.                                      | Medium                                     | 2008   | Listed based on downgrade of shellfish harvesting classification.   |
| 03 2656         | Southeast Florida Coast | 8998 | FLORIDA ATLANTIC COAST | ESTUARY        | 3M              | Mercury (in fish tissue)                                 | Hg less than current criterion 0.025 ug/L for an estuary, or 0.5 ug/L for freshwater. | Low  | 2011   | Data verified to be within the last 7.5 years. Confirmed recent data for coastal fish advisory for Ladyfish, grouper, and tuna. Includes WBIDs 8101B and 8101C. |

<sup>1</sup> "In I<sup>1</sup>" means the natural logarithm of total hardness expressed as mg/L of CaCO<sub>3</sub>. For metals criteria involving equations with hardness, the hardness shall be set as 25 mg/L if actual hardness is < 25mg/L and set at 400 mg/L if actual hardness is > 400 mg/L. The concentration causing impairment for nutrient listings is the median.

<sup>2</sup> Where a parameter was 1998 303(d) listed, the priority shown for it in the 1998 303(d) list was retained (high or low). Where a parameter was only identified as impaired under the IWR, priorities of high, medium or low were used. Waterbodies where Mercury (in fish tissue) has been identified as impaired under the IWR, have been given a medium priority and a TMDL is scheduled for 2011.

<sup>3</sup> PP - Planning Period (January, 1991 through December, 2000); VP - Verified Period (January, 1996 through June 30, 2003)

Note: St. Lucie - Loxahatchee Group 2 Verified List (VL) is based on FDEP IWR Run 14.2.